

## **Enabling Successful Infill Development**

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### **EXECUTIVE SUMMARY**

Over the past ten years, Administration has undertaken a number of monitoring programs for residential infill development producing various amendments to the rules of the Land Use Bylaw (the Bylaw). On 2017 April 24, Council directed Administration to create a scoping report regarding 11 recurring items and on 2017 December 18, Council approved the direction of the scoping report, for a two-phased approach, and added a twelfth item to the list.

This report proposes Land Use Bylaw amendments to resolve the items identified for Phase 1, as well as proposes a recommendation for next steps as a result of the review of the remaining items of Phase 2. Phase 2 was originally scheduled to return to Council in 2018, Q4, however, based on analysis and engagement over the past seven months, Administration is prepared to make a recommendation on Phase 2 through this report.

Phase 1 addresses those items that can be resolved through technical Bylaw amendments - front porches and subterranean structures. The proposed Bylaw amendments are in Attachment 1. They accomplish the following outcomes:

1. Front Porches: One concern was the lack of front porches for existing and new infill homes. Administration is proposing encouraging front porches by allowing them to project 1.8 metres into a required front setback and exempting them from parcel coverage.
2. Subterranean Development: The second concern was the impact on soft vegetation, construction activities and foundation impacts (on the adjacent lot), and drainage. While the Land Use Bylaw is not the appropriate place to address drainage concerns or construction activities, Administration is proposing restrictions and allowances for subterranean developments that would help maintain soft vegetation in the front of the property.

The results of the review of the Phase 2 items showed that the remaining items cannot be addressed through individual Bylaw amendments for a number of reasons (see Attachment 2). Rather, a more comprehensive approach is required regarding the rules and districts related to infill development. This will ensure the rules are better aligned with the policies of the Developed Areas Guidebook, ensuring they can better support the policies to achieve desired outcomes.

Administration is proposing to report back in 2019 Q4, with a suggested outline of changes to the infill districts of the Land Use Bylaw. This work will outline how to align policy, guidelines, and Bylaw regulations to better support the evolution of Calgary's neighbourhoods.

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### ADMINISTRATION RECOMMENDATION:

That Calgary Planning Commission recommend that Council hold a Public Hearing; and

1. **ADOPT**, by bylaw, the proposed amendments to Land Use Bylaw 1P2007, (Attachment 1);
2. Give three readings to the proposed bylaw; and
3. Direct Administration to return with an implementation plan outlining options for changes to the Land Use Bylaw 1P2007 through the Standing Policy Committee on Planning and Urban Development no later than Q4 2019.

### PREVIOUS COUNCIL DIRECTION / POLICY

On 2017 December 18, Council adopted the recommendations contained in PUD2017-1125 and added another item, building setbacks, which will be included for Phase 2:

“That Council:

1. Direct Administration to report back to the Calgary Planning Commission no later than Q3 2018, with Land Use Bylaw amendments to address issues identified in Phase 1; and
2. Direct Administration to report back to the SPC on Planning and Urban Development no later than Q4 2018, with results from Phase 2.”

On 2017 April 24 (report PUD2017-0313: Monitoring Report on Contextual Single and Semi-detached Dwellings) Council directed Administration to develop a scoping report on whether to move forward with Land Use Bylaw 1P2007 (LUB) amendments for 11 recurring and emerging issues related to infill development and report back by 2017 December. The 11 items raised by Council were:

- Eave and Peak Height Differentiation;
- Massing;
- Front porches;
- Subterranean structures extending beyond above-grade footprints;
- Hardscape coverage;
- Green landscaping;
- Tree retention in the Demolition Permit, Development Permit, and Building Permit stages;
- Drainage;
- Non-conforming/non-standard lots;
- Materials; and
- Vehicle loading and storage.

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### **BACKGROUND**

This Phase 1 report addresses Council's direction to review two recurring topics that could be resolved through technical Bylaw amendments. One concern was the lack of front porches for existing and new infill homes. The objective is to develop technical Bylaw amendments to encourage more porches. The second was the concern of subterranean developments that were larger than the main floor plate of the home. The concern was the potential of this development on sustaining soft vegetation on a lot, construction activities and foundation impacts (on the adjacent lot) and drainage. The objective was to determine if Bylaw amendments for restricting/allowing subterranean development could address these concerns.

Currently, porches are defined as "...an unenclosed, covered structure forming an entry to a building" in the Bylaw. Since these spaces are covered and add to the mass of a building, they currently count towards the amount of the parcel that is allowed to be covered by buildings, referred to as *parcel coverage*. When offered the choice between indoor floor area, that can be used year-round, and exterior space that is often seen as seasonal, the market has favoured indoor floor area.

In Developed Areas, the minimum distance a house can be to the front property line depends on how close the neighbouring homes are from their front property lines. This is referred to as the *contextual front setback*. This ensures an infill home will maintain an established street pattern and limit the visual impact of the new home on neighbouring homes. Each land use district also has a required minimum setback from the nearest part of a house to the front property line, called the *minimum front setback*. This means that if the *contextual front setback* is less than the *minimum front setback*, the development must still be setback to the minimum of the district. Typically, subterranean developments extend to the boundaries of the development above, mimicking the main floor plate. Of the applications that were reviewed, three per cent had subterranean developments larger than the floor area of the main floor, which includes areas that are underneath a porch or rear patio. A total of one per cent of reviewed applications had larger subterranean developments, which includes subterranean developments that extend to the rear property line or have two storeys that are underground. Concerns around drainage and the ability for a tree canopy or opportunities for soft landscaping have been voiced by both Council and citizens. There are currently no limits to the depth that a building can go underground and the development may extend to any property line.

Regarding Phase 2, over the last 10 years, Administration has responded numerous times to issues associated with these topics. Despite these attempts to address concerns, these topics continue to reoccur as a source of contention for one or more stakeholders. These topics are symptomatic of broader concerns of: 1) how the rules fit into the larger vision for communities and the city, and 2) what the intent of the rules is in relation to this vision.

### **INVESTIGATION: ALTERNATIVES AND ANALYSIS**

#### Phase 1

In order to understand the concerns related to the issues and to identify potential solutions, a working group was created. The working group consisted of representatives from Building Industry and Land Development Association, Calgary Region (BILD) and the Federation of

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Calgary Communities (the Federation), individual builders, and a variety of community members.

Over 2000 planning applications from the past three years were reviewed, with the focus on understanding the variety of porch designs for new and existing homes, and the extent to which subterranean developments were going beyond the main floor plate. While most homes have a covered entryway that is technically defined as a porch, Administration rarely sees useable front porches that act as covered outdoor amenity space, large enough to accommodate furniture.

### **Front Porches**

Given that usable front porches aren't often seen with new homes (or retrofitted to existing homes), Administration began this review by looking at the best way to create more opportunities for front porches, while respecting that if not done correctly, these could add mass and impose into the semi-private open space typically considered to be a front yard. There were three basic principles that the working group agreed upon when deciding on the options to solve this issue. The front porch should:

1. Provide an area that is a functional outdoor amenity space.

The working group wanted to have an area that provided enough space for outdoor furniture such as a chair and table, with room to walk around. Administration is proposing to allow a porch to project a maximum of 1.8 metres into the required *contextual front setback* but the *minimum front setback* still needs to be met. Should the house be set back deeper from the *contextual front setback*, the porch may be deeper, providing more space as needed. This proposal meets this principle of a functional outdoor amenity space by providing enough area for chairs, a table, and space for movement.

Alternative options were reviewed, including creating a minimum and maximum size area, but Administration advises that this unnecessarily restricts unique sizes and shapes that may provide visual interest and limit a homeowner's ability to create a porch that suits their needs. See Attachment 3 for the different porch designs considered.

The Bylaw already allows porches to be added to existing buildings, when they meet the rules of the Bylaw, to be exempt from a Development Permit. Exempting porches from parcel coverage will provide the greatest incentive, making it possible for homeowners to have a functional outdoor amenity space without sacrificing indoor floor area.

2. Create a transitional space between the public realm and the private home.

The goal of developing a transitional space was to have an area that was not fully accessible to the public, but open and visible to the public. By limiting the height of the porch platform to 1.2 metres for the portion that projects into a *contextual front setback*, the porch becomes ground-oriented, making it a semi-private space. For any portion of the porch that does not project into this front setback, there is no requirement to meet the 1.2 metre height.

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3. Not produce unintended consequences that would exacerbate other infill concerns such as massing and privacy.

The height restriction for the porch platform will reduce impacts to neighbouring homes by ensuring the massing of the porch is not imposing. This is further enhanced with an additional rule that there may not be an enclosed area, such as a bedroom or loft, above the roof of the porch.

The table below provides a summary of the general concepts of the proposed Bylaw changes for front porches:

<b>Current Bylaw Approach</b>	<b>Proposed Change</b>	<b>Outcome</b>
Porches may not project into a front yard setback unless a relaxation is requested. A relaxation opens the development to the appeal process.	Porches would be able to project into a front yard by 1.8 metres, up to the minimum allowed by the district, without having to request a relaxation.	This would encourage more homeowners to add a porch to their home as there is less of a restriction if you go into the front yard and the porch does not trigger a potential appeal.
Porches are counted towards parcel coverage. This creates a situation for a homeowner to choose indoor living space or outdoor living space (porch) in order to meet parcel coverage requirements, without needing a relaxation.	Porches would not be included into parcel coverage.	This change allows a homeowner to have both indoor and outdoor living spaces as the porch is no longer part of the parcel coverage restriction.
No existing rule	Height of the porch platform is limited to 1.2 metres if it projects into a front setback area.	This allows the porch to project into the front but height is restricted to reduce the massing of the porch to the neighbours.
No existing rule	Portion of the porch that projects into a front setback area, must be open.	The requirement for the sides of the porch to be open will decrease massing and avoid a “billboard effect” for neighbours.

### **Subterranean Development (Basement and Foundations)**

Given that Administration does not have many examples of basement developments projecting beyond the floor plate of the main floor of the home, Administration is taking a proactive approach to this issue to introduce parameters early to ensure successful infill development. Administration began this review by identifying potential concerns with subterranean development, when exceeding the footprint of the main floor above. The concerns are:

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### 1. Future opportunities for soft vegetation (planting trees and sod) onsite.

The working group unanimously agreed that maintaining opportunities for planting trees or having a lawn onsite, particularly at the front of the home, was important. The proposed amendments require basement and foundation elements to meet the *minimum front setback* for the district. This change will protect an area in the front yard (*front setback area*) from excavation and protect the roots of a tree in a boulevard (see Attachment 4). There were additional discussions regarding restrictions into the rear yard; however, the working group acknowledged that there could be ways to provide vegetation in the rear yard, while still allowing subterranean development beneath. This could include lowering the ceiling of the subterranean development, in order for top soil replacement. Based on this, Administration recommends not providing restrictions in the rear yard at this time.

### 2. Construction disturbances, including foundation impacts to neighbouring homes.

Construction concerns were separated into those that can be addressed through the Bylaw and those that are governed by other City regulations and Provincial Codes. The Bylaw and Codes can provide limits on the building envelope in order to minimize disturbances. One disturbance identified was around the proximity to the neighbouring side property line, and impacts that construction can have on neighbouring property. The working group was of the opinion that construction disturbances are to be expected, and foundation impacts are addressed through other processes, such as complaints to 311 and the review/inspections of building permits. The group would rather have the Bylaw be flexible in situations where basement and foundation developments would benefit from being located in side setbacks. These situations include where property owners would like underground connections to an accessory building that is often located closer to a side property line, or where a homeowner needs more space underground but does not want to develop into the rear yard as it would impact vegetation. As a result of this discussion, an initial proposal to have basements and foundation developments meet the side setbacks was eliminated.

### 3. Drainage.

The third concern related to subterranean development is drainage. The focus of this discussion was on two elements: lot grading and storm water runoff. Both of these items are directly addressed through the City's Lot Grading and Drainage Bylaws. Basement and foundation elements could impact both lot grading and drainage. However, alterations to a property can be done that address grading and drainage, while being able to support large subterranean developments. Some examples are low impact development practices such as permeable pavements, absorbent landscaping, green roofs and swales but the effectiveness of each will depend on the characteristics (soil composition, water table, etc.) of the lot being developed.

There is ongoing work with the Lot Grading and Drainage Bylaws. Once this work has been completed, Administration will ensure continued alignment with this initiative and the Land Use Bylaw can be amended to support the outcomes of this review, if appropriate. The table below provides a summary of the general concepts of the proposed Bylaw changes for subterranean development:

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Current Bylaw Approach	Proposed Change	Outcome
Subterranean development has no restrictions. This form of development may extend to any property line.	Subterranean development will be allowed to extend into the side and rear property lines but may not develop within the required front setback area.	This change will help with the protection of trees on public land and provide the opportunity for the choice of soft landscaping in the front yard of a home.

### Conclusion

The proposed amendments provide a short term, immediate solution to encourage front porches in the Developed Areas. By allowing the porch to project further into the front yard; no longer including the porch in parcel coverage; and continuing to exempt porches from requiring a development permit under certain circumstances, provides incentives to add them onto new and existing homes. The proposed amendments also take into consideration the potential impacts to neighbours by limiting the height and requiring the portions of the porch that project into the front to be open, to reducing building massing.

The proposed amendment to require subterranean development to meet the front setback, is applicable citywide as there is a clear benefit to having space in the front yard to ensure existing and new public tree root systems are protected. The change also provides the opportunity to plant sod, trees and other vegetation in the front yard, which is visible to the public. The proposed amendments allow flexibility for a nuanced approach where circumstances of a parcel could be accommodated, whereas a broad reaching regulation may be overly restrictive.

Administration is requesting that Calgary Planning Commission recommend that Council hold a Public Hearing and adopt by bylaw, the proposed amendments and give three readings to the proposed bylaw. The amending bylaw is required to be advertised in order to inform the public of the potential change.

### Phase 2

Discussions with stakeholders over the past seven months have indicated that the underlying issue with infill development isn't about the specific number related to a rule, but rather about the bigger issue of how infill development compliments the evolving character of a developed community.

Based on this, Administration is proposing that the remaining items be examined through a comprehensive approach, rather than through individual Bylaw amendments. Attachment 2 outlines several explanations behind this approach. Amendments to the Bylaw are valid approaches to solving technical discrepancies, however, based on discussions and analysis, Administration acknowledges that the remaining items are more than technical discrepancies and that a more comprehensive approach to infill development is needed. This approach includes first discussing what is important to stakeholders about their communities balanced with the vision and outcomes of the *Municipal Development Plan*, and then discussing how those priorities are implemented by rules. Key themes in these discussions will be:

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1. Alignment with policy.
2. The interaction of infill development with the public realm.
3. The interaction of infill development with neighbours.
4. The elements of development that matter most.
5. Present and future housing needs.

Over the next year, Administration will have multiple conversations about communities rather than about the individual rules. One of the goals of this approach will be to align policy, guidelines, and Bylaw regulations to better support the evolution of Calgary's neighbourhoods.

### **Stakeholder Engagement, Research and Communication**

As noted earlier in this report, a working group of external partners was engaged for these amendments. The individual members and the organizations and communities they represented are in Attachment 5. The group met on average twice a month to discuss these concerns, as well as to discuss amendments to the Residential – Contextual Grade-Oriented Infill (R-CG) District. This approach was beneficial in getting all viewpoints in one venue to develop solutions. Letters from working group members are in Attachment 6.

Both BILD and the Federation provided updates to their members regarding the progress of this work and the City created a webpage for the broader public.

### **Strategic Alignment**

The proposed Bylaw amendments address Council's direction by providing solutions to encouraging more front porches and concerns regarding basement and foundation developments that extend beyond the floor plate of the main floor. They help provide options and clarity for a number of communities at various stages of their life cycle and help address common, technical concerns related to infill development. This work generally supports the policies of section 3.5 of the Municipal Development Plan which acknowledges that redevelopment should support the revitalization of local communities and create great communities by maintaining quality living environments and enhancing community character and distinctiveness.

Administration is prioritizing work programs to address some of the critical gaps and systemic issues continuously heard at Council, in communities and from industry. Administration has combined efforts to ensure consistent discussions, feedback, and information sharing between initiatives, including the Established Areas Strategy, Main Streets, the Municipal Development Plan Monitoring, the Developed Areas Guidebook, amendments to the R-CG district, and ongoing community planning work. The documents mentioned above are the tools that Administration uses to encourage outcomes that align with the vision of making Calgary a great place to make a living, a great place to make a life.

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### **Other Considerations**

On 2018 March 19, Council adopted amendments to the Bylaw which identified and implemented efficiencies for homeowners and small businesses. These amendments were minor in nature but eliminated some redundancies and clarified some processes for applicants. Administration has monitored this work to ensure the changes have not resulted in unanticipated issues. Administration has not seen any issues with these changes over the past 3 months but will continue to monitor throughout the rest of 2018.

### **Social, Environmental, Economic (External)**

#### **Social**

The increase in flexibility for homeowners to build front porches that add functional outdoor amenity space could positively impact the way community members and neighbours interact and build relationships with one another.

#### **Environmental**

Limiting the ability for front porches and subterranean development in the front setback will encourage the retention of existing public and private trees.

#### **Economic (External)**

Eliminating hurdles for homeowners will minimize development pressures often associated with cost increases and will allow homeowners to make decisions based on needs rather than rules.

#### **Financial Capacity**

##### ***Current and Future Operating Budget:***

No impacts are anticipated.

##### ***Current and Future Capital Budget:***

No impacts are anticipated.

#### **Risk Assessment**

No risk.

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### **REASON(S) FOR RECOMMENDATION(S):**

Administration's recommendations provide incentives to existing homeowners to add a front porch to their home, and to home designers to incorporate front porches in the design of new infill homes. This is done without the drawback of it being included into parcel coverage and taking into consideration the impact of the porch to adjacent homes. The recommended changes to subterranean development supports the protection of public trees, provides an opportunity for soft landscaping in the front yard, while providing flexibility of basement development in the rear yard.

Administration's recommendation regarding the next phase of work will allow for a conversation with stakeholders regarding the bigger picture vision rather than a discussion about individual rules. The outcome of this work will facilitate the alignment of policy, regulation and guidelines, to ensure successful infill development.

### **ATTACHMENT(S)**

1. Proposed Amendments to Land Use Bylaw 1P2007
2. Phase 2 Background
3. Porch Sketches
4. Subterranean Development Sketches
5. Working Group Members
6. Letters from Working Group Members